

The present TVRO industry is clearly so anti-American in so many ways because of the monopoly and the dysfunctional marketplace. If the TVRO industry were a married couple, no judge in the country would deny there were grounds for divorce based on the rate of piracy alone. We need to stop playing monopoly, for everyone's benefit, not least of those being the owner of the present encryption standard. Just look at what the encryption monopoly has done to the growth of this industry. If you don't think monopoly has stunted TVRO, then you should listen to the reasons Don King lists for why he won't let his boxing matches go up on the VCII PLUS.

It's time to give the TVRO Industry a free and open TVRO encryption environment. We need to begin by accepting the fact that a multiple encryption environment already exists. From there, we need to admit that, by forcing consumers to accept only the VideoCipher, we have limited the industry's growth in all kinds of ways. Imagine the benefits for all concerned if there were a universal standard for satellite IRDs that included a half-dozen or so ports for encryption smart cards. Europe already is looking at the wisdom of doing just such a thing. Canada's Dectec is developing just such a device with it's "open architecture" Secure Universal Norm system.

If consumers bought an IRD that could accept a VCII PLUS RS smart card, as well as one from B-MAC, DECTEC, Leitch, D-Code, SkyPix, etc. programmers wouldn't have to worry about security upgrades or having to pay monopoly tier bit fees to one DBS authorization center. Consumers wouldn't have to get caught in massive swapouts and equipment obsolescence nightmares. One receiver, like one TV set, could be made to receive everything. Imagine a TVRO world where competition amongst IRD manufacturers, programmers, encryption software, etc..... drove prices down at the same time it made all kinds of satellite TV available to everyone.

Monopoly only benefits the monopolist. Let's stop playing monopoly, for everyone's good, especially the consumer.

# INTELLECTUAL PROPERTY FRAUD REPORTER™

*Counterfeiting, Piracy, and Gray Market Legal Developments*

Volume 2, Issue 14

July 29, 1991

## **Microsoft's Windows Version 2.03 infringe Apple's copyrights.**

In 1989, the court ruled in part that a 1985 licensing agreement entered into between Apple and Microsoft barred Apple from suing on all but ten of the disputed visual displays because they were displays covered by the agreement. Apple Computer, Inc. v. Microsoft Corp., 709 F. Supp. 925, 727 F. Supp. 1428 (N.D. Cal. 1989).

Hewlett-Packard also argued in a motion for summary judgment that Apple's copyrights were invalid because Apple had committed fraud on the Copyright Office. However, the court rejected this claim in a decision this April.

Hewlett-Packard responded by moving for reconsideration of the holding, and brought antitrust counterclaims against Apple. At the same time, Apple sought leave to allege that Microsoft had engaged in coercive activities which gave Apple the right to rescind the 1985 agreement (thereby removing the agreement as a defense to Apple's infringement claims). Apple also sought leave to broaden the action to include infringement claims against a new version of Hewlett-Packard's NewWave program and Microsoft's Windows Version 3.0.

In June, Judge Walker issued a split decision, denying Hewlett-Packard's motion for reconsideration, as well as Apple's motion to include the allegations of coercion. At the same time, the court ruled that the Windows Version 3.0 and the NewWave 3.0 could be included in the suit. According to the court, "Apple's original complaint read liberally, appears to embrace its updated versions of Windows, and, thus, it appears that defendants that subsequent versions of Windows and NewWave are reached by Apple's litigation claims."

At another hearing earlier this month, Judge Walker reportedly was averse to accepting Hewlett-Packard's antitrust claims, and stated that even if he allowed the claims to remain in the suit, they would be tried after Apple's infringement claims were heard. The court also ordered that all depositions be completed by the end of next February.

## **DECTEC Accuses General Instrument of Piracy and Infringement in Canadian Law Suit.**

### **DECTEC filed suit against General Instrument ("GI") in Toronto on June 14 alleging piracy and patent and copyright infringement.**

Background -- In the piracy and infringement suit, DECTEC alleges that upgrading in GI's Videocipher II and II Plus satellite models infringe on DECTEC's technology, specifically DECTEC's S.U.N device. DECTEC claims that GI pirated the upgraded technology when GI obtained permission from Canadian authorities to determine whether DECTEC's S.U.N device is usable as a satellite TV piracy decoder. Under the Canadian "Anton Pillar Order" a complainant who suspects that a company's technology is being used for piracy may be allowed to seize the company's records to determine if the technology is indeed being used for piracy.

In January 1991, GI filed a complaint alleging piracy and infringement by DECTEC. A Canadian court ordered DecTec to freeze activities on the basis that the S.U.N device violated GI's copyright and patents. The Canadian court's order allowed for the seizure of all S.U.N devices and related materials. However, in February 1991, the court ordered GI to return all of the DECTEC's documents.

In its present suit, DECTEC claims that GI used information obtained in its review of documents under the "Anton Pillar Order" to pirate information. In the suit, DECTEC requests a permanent injunction to restrain GI from infringing on DECTEC's S.U.N technology. In addition, DECTEC seeks a declaration that GI's VideoCipher models are devices for piracy.

## **LEGISLATION**

### **Protection Enacted for Foreign Producers of Semiconductor Chips.**

Legislation to extend the authority of



Jan. 24/88

# WHAT'S HAPPENING



## ANOTHER ECM WAVE

SAN DIEGO...General Instruments Corp. (GI), who manufacture the VideoCipher® II scrambling system, instituted another electronic countermeasure (ECM) against illegal decoders on December 15. The latest ECM attacked boxes with the 0181 software, commonly know as "five-star" or "blue boxes".

GI was hoping that the five-star version of the VideoCipher® II would remain secure and stop hackers cloning new numbers. Then they could recall all the older boxes and upgrade them to the secure five-star software. But by December the hackers shattered GI's hopes, proving once again that they are up to the challenge, and began pulling keys from five-star boxes with ease, and cloning many new VideoCiphers®.

It is obvious that GI bought one of the early cloned five-star boxes, because the December 15 ECM exploited a mistake in the hacker's software, and shut down all cloned five-star boxes in one swoop. Within days of the ECM hackers were making the rounds with updated software to turn the boxes back on again. In fact, it has been reported that the hackers improved their design by getting rid of an annoying "please wait" message that appeared on the screen for up to a minute before the audio came on.

While all this was going on GI executives were huddled with most of the VideoCipher® programmers and the Satellite Broadcast and Communications Association (SBCA), the U.S. trade association, in a consolidated effort to stamp out signal theft. Attending the first meeting of the "Piracy Task Force" were representatives from CNN, HBO, United Video Inc., The Disney Channel, Showtime/The Movie Channel, Tempo, Netlink, Eastern Microwave, Select TV, American Extasy and SBN.

Although reports of what happened at the meeting remains a secret, it was reported that a consensus emerged among those attending that GI is losing the battle with the VideoCipher® hackers to make their scrambling

system secure. GI is said to have spent over \$1-million on anti-piracy activity in the last year, and is believed to be embarking on a massive new advertising campaign in Canada and the U.S. to inform consumers that they are breaking the law by using chipped decoders, and what the penalties are when caught. The new GI advertising campaign is also believed to include a confidential toll-free tattletale number so that consumers can turn in the names of the hackers.

Sources said the signal owners attending the Piracy Task Force meeting are now resigned to the fact that any scrambling system, no matter how sophisticated, will always experience a small percentage of signal theft. Like cable, aggressive law enforcement, heavy fines, and continued ECM attacks, will keep the satellite signal theft problem at reasonable levels. Cable companies in Canada acknowledge that between 5 and 20% theft of pay-TV channels is normal, depending on the type of decoder used. However, it is acknowledged that over 90% of the 120,000 VideoCiphers® decoders now operating in Canada are stealing signals.

GI is also reported to have told members of the Piracy Task Force that by the fall of this year they plan to introduce a Very Large Scale Integration (VLSI), single-chip version of the VideoCipher®, which they believe it is impossible to extract the keys from, and this will eventually secure the VideoCipher® decoder. Hackers retort that when the VLSI decoder arrives they will simply mass-produce their own version of the older VideoCipher® decoder and continue cloning.

In a related story, OnSat has learned that a new, and more sinister, version of how to break the VideoCipher® II decoder is emerging. Whereas hackers now have to subscribe to at least one scrambled channel so a box can receive the keys, which are then copied (cloned) into other boxes, the new version requires no subscriptions. The "Doomsday Solution", as it is known by the hackers, requires the consumer to punch in a code every four months us-

ing the VideoCipher's® keypad, then all the scrambled channels are decoded. Because a "Doomsday" box is not registered in the GI computer by having a subscription, it is believed to be immune from ECM attacks similar to the one that shut down the five-star boxes. Hackers say the "Doomsday Solution" is a true break of the VideoCipher® decoder, because it defeats the actual Digital Encryption Standard (DES) algorithm by supplying a master decoding key. With the "Doomsday" box the programmers get no subscriptions, and it may be a contentious legal issue that hackers supplying only a series of numbers are breaking the law, because the consumer turns the box on by entering the code.

The pace of all this VideoCipher® nonsense is making my head spin. I have said many times in this column that breaking the VideoCipher® decoder may bring doomsday to this industry. If the programmers can't get paid for their signals, they will not offer them to the dish owners, choosing instead to use a very expensive decoder, well beyond the price range of most consumers.

I believe the final initiative now lies with the U.S. programmers. They must agree to third-party marketing of their signals, their programming packages will emerge at much lower prices, and put the hackers out of business overnight. If programmers don't agree to this voluntarily, the Satellite TV Fair Marketing Act, now before the U.S. Senate and House of Representatives, is the only hope of sorting out the mess this industry is now in. Something, or someone, 's got to give folks!



by  
BILL BARR

CANADIAN EDITOR



## CHAIRMAN ALARMS DISHEADS

**T**ORONTO...A published report in the Globe and Mail attributing several statements to David Colville, the new chairman of the Canadian Radio-television and Telecommunications Commission (CRTC), stirred many people in the home dish industry in Canada.

Under the headline, "Clear path for TV Pirates", Colville is quoted as saying, "If the Department of Communications (DOC) wants to send the RCMP in to seize dishes, I just can't see it if the dishes come down to the size of a dinner plate [placed] in a window, rather than a three-meter antenna on a steel pole in a backyard that is easy to identify. There is no way you can police that," Colville said.

Presumably, the CRTC chairman was responding to queries as to the action that will be taken against, what the Globe's misinformed reporter calls "illegal satellite dishes", in view of the new powers the DOC have under, the soon to be proclaimed, new Broadcast Act (Bill C-40). The Globe's reporter should know that satellite dishes are not illegal, the CRTC exempted home satellite systems from requiring a license 1983.

Colville's approach is very realistic. It seems to indicate he prefers a carrot to a big stick to get Canadians to tune to Canadian programming fare by instituting a policy that would lead to more and better Canadian productions, plus availability.

Any reference to small satellite dishes, receiving hundreds of U.S. channels, strikes terror into Canadian broadcasters, cable, the CRTC and DOC. They know about the imminent onslaught into Canada of hundreds of digital compressed satellite channels received on plate size dishes. They also know, all the protective regulations in the world, are not going to prevent

Canadians from participating in this type of entertainment delivery revolution.

Star Scan/Sky Pix will soon begin transmitting several channels on SBS-6, eventually adding up to eighty channels. The key to getting eighty channels on one satellite is a new phenomenon, digital video. Whereas we are now familiar with digital audio through the VideoCipher decoder and compact discs, digitizing the video allows eight channels to fit on one satellite transponder. This significantly reduces the cost of a satellite channel, thereby reducing the cost of programming.

However, Mr. Colville's predictions of "pie-plate size" satellite dishes in Canada is premature. It's true the power of the new satellites is increasing dramatically, but in Canada we will be watching spillover signals, thereby requiring larger dishes here. Furthermore, rain fade is a big problem with high-powered direct-broadcast-satellites (DBS) where rain or snow greatly attenuates the satellite signals passing through the lower atmosphere. All this adds up to larger satellite dishes in Canada, so don't throw out your ten foot diameter satellite antenna's just yet. The optimum dish size required in various parts of Canada cannot be ascertained until Starscan/ Sky-Pix fires up and we can get signal reports from the field. Don't be fooled by the U.S. ads showing 12 inch satellite dishes.

As for the CRTC chairman's opinion that he will convince Canadians to spend their DTH dollars in Canada, frankly, this is the only course of action open to his commission. The CRTC presently dictates to broadcasters and cable through a threat of license revocation. If it tries to dictate directly to Canadians as to what they can or can't watch on their satellite dish, the commission will run afoul of its political masters, as such punitive measures will affect MP's at the ballot box.

Up to now it's not the CRTC, or the Canadian government, that is preventing channels like HBO coming here, its the people who own the movies on these channels -Hollywood - and their silly distribution tactics that are not adaptable to satellite technology, which knows no territorial boundaries.

Therefore, another task we as an industry must accomplish soon is to have the State Department's embargo on

programming coming to Canada lifted. Also, its equally important to convince U.S. programmers there is a tremendous DTH market here. Furthermore, we will never be able to do this unless Canada makes a transition from the present high level of piracy here to a secure decoder.

With all of the above issues in mind, there is a proposal being circulated to form an organization to fight for access to programming in Canada called, "The Canadian Viewers Rights Organization" (CVRO). A copy of this proposal appears in the Mailbag section of this week's OnSat.

The need for CVRO became obvious due to the failure of SCAC to voluntarily raise the funds needed to fight the "access" battle. This proposal only applies to new satellite dish sales. If CVRO becomes a reality, then another plan will be put in place to enable the present dish population, estimated to number approximately 300,000, to contribute to the access fight.

It's my belief that in several years our industry will be operating on a secure scrambling system, thereby forcing everyone who has a dish to pay for the programming he or she wants to receive. Therefore, it's important for us to get access to a wide variety of satellite programming in Canada soon, if we wait until the skies go dark, it will be too late, we need to fight the access battle now!. Furthermore, if the skies do go dark for disheads, we will just be playing into the hands of those who want to kill this industry in Canada. Please don't get out-smarted, if you're asked to contribute to CVRO, please anti up!

## GALAXY ONE TO MOVE

**N**EW YORK...Continuing the move of satellites to the FCC's new two degree spacing decree, the next major satellite to move is the popular G1 bird. Galaxy 1 will be moved one degree to 133 degrees east starting on June 21 and completed on June 28. Dish owners will be required to realign their dishes in order to get optimum signals from this bird.

Moving G1 will make a hole in the orbit for G.E. Americom's new C4 bird, to be placed at 135 degrees west.

# Exhibit F

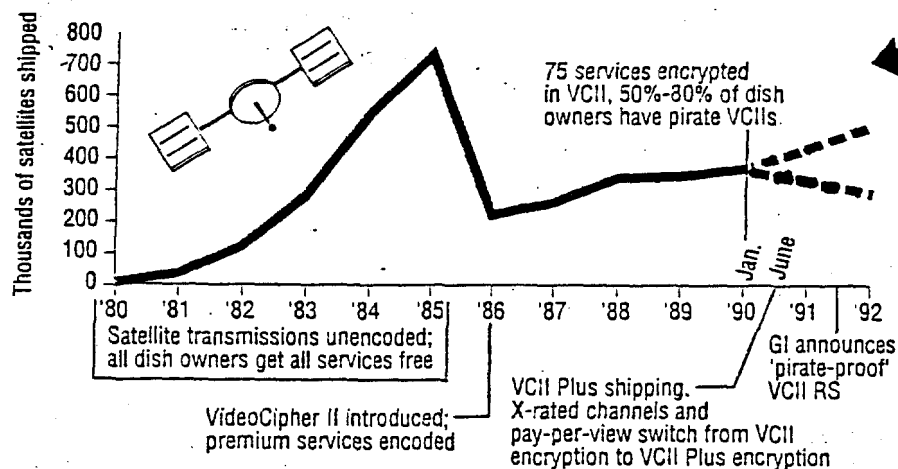


# Electronic Engineering TIMES

THE INDUSTRY NEWSPAPER FOR ENGINEERS AND TECHNICAL MANAGEMENT

## GENERAL INSTRUMENT'S OUT TO SINK PIRATES . . . AGAIN

*But when satellite dish owners lose free access, dish sales seem to go flat*



## GI tips 'pirate-proof' fix for VideoCipher II

By RICHARD DOHERTY

Nashville, Tenn. — General Instrument Corp. last week confirmed its intention to replace the 810,000 VideoCipher II satellite-signal decryption systems it now has installed with a new system called the VideoCipher II Renewable Security (VCII RS). That number includes 180,000 "pirate-proof" VCII Plus systems shipped

during the past 18 months. The swap will cost the company "tens upon tens upon tens of millions of dollars" over the next six months, a GI executive said.

The San Diego-based company announced the VCII RS on the eve of the Satellite and Business Communications Association (SCBA) trade show here.

The VCII RS box will have its own decryption circuitry. But if the VCII RS box is ever compromised by pirates, paying customers would be issued cards that would fit into a slot in the back of

# GI replacing satellite security systems

Continued from page 1

each box; each replaceable "Ciphercard" would contain additional decryption circuitry. Should those cards ever be compromised, customers would then be compelled to swap only cards instead of entire boxes, which was the case in the past.

When pirates learned how to defeat the decoder in the original VCII, gaining free access to programming for which everyone else was paying, GI introduced the VCII Plus with a new decoder, and customers had to trade up. But since there have been no verified reports of pirating of the VCII Plus, satellite broadcasters at the SCBA show were wondering why GI decided to develop the VCII RS, especially considering it could cost the company as much as \$45 million to replace paying customers' VCII's and VCII Pluses.

"We should have had a card-type unit back in 1988," said Chris Walczak, general manager of Toshiba America's home-satellite effort (Buffalo Grove, Ill.). "There never should have been a VCII Plus."

The swap is "going to cost us upon tens upon tens of millions," said GI VideoCipher manager Michael Meltzer. Other GI spokesmen ventured a more specific estimate: \$45 million. Part of

the expense stems from the fact that GI will not be able to salvage any components from the existing VCII's and VCII Pluses that it will accept in exchange for RS systems. Furthermore, the company is considering easing this field service-call burden for dealers by paying for their trip to each consumer's home.

On the other hand, GI is touting these revisits as an opportunity to sell additional hardware and entertainment-programming services to customers.

With no demonstrated piracy of the 6502 processor upon which the VCII Plus is based, some satellite dealers suspect that GI's rationale is to cut itself in for a slice of the pay-per-view business. Every VCII RS shipped will contain a dial-up internal "modern-on-module" subsystem, allowing each converter to be addressed individually.

GI engineers confirmed that the company "is looking at" anti-videotape technology, additional digital audio and data-service delivery, and possibly the use of the RS Ciphercard port as a digital gateway to enhanced video services via satellite.

To better prepare dealers for the equipment exchange that lies ahead, GI conducted hourly seminars at the satellite show.

Dealers may want a stake in the

anticipated additional revenue GI may generate from the RS upgrade. Some dealers stopped just short of labeling the RS system announcement as a means for GI to boost pay-per-view revenue, upon which it makes more money than monthly programming services such as HBO, Showtime and Disney.

The SBCA estimates that 3.4 million Americans receive pro-

broadcasters, aware of this trend, said they would entertain GI's campaign to roll out yet another module, and decide later whether to endorse the system.

Winston Cox, chairman and chief executive officer of the Showtime Networks, called the RS program a "second chance" for the industry. Still, he said Showtime is not likely to take any formal position on RS for weeks.

**S**ome satellite dealers suspect GI's reason for the replacement is to cut itself a slice of the pay-per-view business.

gramming via satellite. The satellite industry had grown to unit sales of 650,000 annually in 1985. At that point, dish owners could pull services like HBO straight off the broadcast satellite for free. The following year, GI introduced the VCII, satellite broadcasters started to encrypt their transmissions, and satellite sales plummeted to 220,000. Now, the VCII encryption system has been cracked, and only about one in five customers with VideoCipher systems pay for their programming—and satellite sales are up again. Most satellite

Customers purchasing any VCII Plus since April 1991 are eligible for the three-year Consumer Security Protection program. They are guaranteed a no-cost swapout and free delivery of any Ciphercards that might be needed. The cards will be mailed or delivered to the consumer's home, a procedure designed to preclude the use of the cards in areas outside the United States.

One programmer told *EE Times* that a cost of \$65 for each card has been bandied about, but no one is saying who will bear that cost, or whether the consumer will actually own the card. GI's Meltzer would only say that "lots of figures have been tossed about" and that \$65 might be one of them.

## Winning support

GI also was busy campaigning to win over satellite-programmer support for RS. An executive of a large entertainment supplier said his company believes there are at least 1 million illegal viewers in Mexico and a nearly equal number in Canada that are getting the Disney channel (for example) for free, and will continue getting it until broadcasters shut down the VCII-encrypted data stream. This programmer and others are in touch with the office of Sen. Albert Gore's, D-Tenn., to ensure that paying VCII subscribers are not cut off before switching to VCII Plus or VCII RS.

GI's Meltzer asserted that "no honest consumer will be disenfranchised." However, some dealers told *EE Times* they are concerned that dish owners will balk at having to schedule a service call for the upgrade, and that some are likely to blame the inconvenience on them rather than on GI—or on the pirates who are being blamed for precipitating the situation.

GI's Meltzer predicted that

take two years to administer.

For the time being, GI said visiting programmers have exhibited a "comfort level" with the technology shown them, although Meltzer declined to name specific programmers supporting the RS architecture or rollout.

GI said it has electronic means of determining which consumers are paying for "some" services and may be illegitimately serving as front men for cloned and chipped decoders. And Meltzer said that direct electronic messaging—to legal and illegal converters—has been considered to alert consumers about the upgrade.

## No hardware

However, while GI said it has hosted several programmers and has shown them boilerplate versions of the RS, there is still no working hardware. The company hopes that there is never a need to ship a Ciphercard to consumers. "That will only occur if there is a break in the system," said Meltzer. Other GI managers said they believe it is a matter of when, not if, the VCII Plus and the RS successor are broken.

Field tests of the RS technology will begin this fall, with pilot production slated for December. The first dealers should receive RS modules in January, and full production—eclipsing and replacing the 30,000 VCII Plus modules now being shipped—is targeted for April.

Compounding dealer concern about the RS program is vagueness in the number of \$400 VideoCipher modules made by GI vs. the number that are legitimately authorized each month. GI said it has 345,000 VCII Plus decoders authorized and 475,000 VCII systems.

SBCA estimates the number of U.S. backyard dish systems at 3.4 million, with the vast majority sporting a VCII decoder. GI acknowledges having made more than 2 million VCII systems and 345,000 VCII Plus units, although some industry estimates say between 3 million and 4 million VCII's have been manufactured. "Every decoder in Canada is compromised," said a GI spokesman, acknowledging the rampant "chipping" of its data encryption standard-based VCII systems.

Currently, most satellite broadcasters are transmitting one signal in the VCII code and another in the VCII Plus code. A special seminar detailing just how—and if—the VCII data stream would be shut down was slated for last Saturday morning. GI managers said the question of when or if the original VCII data stream—now serving millions of

Page 80, ELECTRONIC TIMES July 15, 1991.

- \* VCII 'cracked'.
- \* about 1 in 5 VCII customers pay programmers
- \* as many as 1 million Canadians getting Disney Channel free
- \* GI know of 810,000 legal VCII's, yet manufactured between 3 to 4 million
- \* "Every(VCII decoder)in Canada is compromised". according to GI spokesman.



## Exhibit G



# INTERNATIONAL INC.

P.O. BOX 2275, SIDNEY, BRITISH COLUMBIA, V8L 3S8, CANADA

Offices: 1962 Mills Road Phone: (604) 655-4463 FAX: (604) 655-3906

September 15, 1989

Andy Ferraro  
Reiss Media Enterprises  
240 Pegasus Ave.  
North Vale, NJ 07647  
USA

Dear Mr. Ferraro:

Further to our telephone conversation today, I'll like to briefly summarize the salient points discussed. Here is our proposal to secure the Request TV signal.

Six months ago our company developed a method of securing the VC II signal. This method is based on taking total control of the data stream, in real time. This proprietary method has been fully field tested in a variety of real world applications. This was done as part of one aspect of our on going R & D program where our engineers prove their skills and enrich their knowledge base by learning to control all consumer and commercial encryption products currently in the marketplace.

Dectec does not apply this knowledge in any inappropriate manner whatsoever. Instead, we use this knowledge to learn from our competitor's mistakes and gain, at the same time, a true view of the engineering capacity each competitor has.

Since the Dectec system under discussion utilizes the VC II technology exactly as originally designed, you can appreciate that our security control system requires a small but necessary amount of cooperation from G.I.

Before you can consider implementing our system, which places the responsibility for system security in the hands of either Dectec or each individual programmer, you will have to ask General Instrument the following question:

"We have equipment we wish to run some tests on. Are you willing to change a service ID and associated monthly codes for us, at our request?"

... 2

If G.I. does not provide this minimal but necessary level of cooperation and you do not have the political and/or legal clout to enforce and maintain this minimal level of cooperation, then we should both be looking for another venue.

Such an alternate venue may be our Telefix product. Telefix was introduced in June, 1988. Telefix allows total control of a VC II, from any remote location, using a standard phone line. An assigned third party can remotely read or reprogram any part of the VC II. As a demonstration of the power and security of the Telefix product, we reprogrammed a VC II located in Caracas, Venezuela with a computer located in Victoria, Canada. This product would be ideal for turning any or all VC II's into true store and forward IPPV units. This product can also match your security requirements.

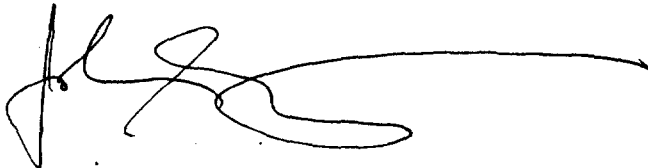
Dectec wishes to demonstrate to all programmers that taking the responsibility for signal security from an equipment vendor (who profits greatly when poor signal security exists) and placing this responsibility in the hands of a third party company which profits only when the signal is secure, is a sensible solution to the dilemma currently faced by programmers using the VC II system.

To implement our system you will have to supply Dectec with an appropriate number of standard consumer or commercial grade modules. For \$350 per module we will install our override proprietary circuitry. The fee for the use of our secure technology will be \$25,000 to initiate the program and \$75,000 after an agreed to period of time has passed which convinces your company that our system is indeed totally secure as originally stated. If you have any technical questions, I would be more than happy to arrange a meeting at our laboratory between senior engineers of your choice and our senior hardware and software engineers.

Dectec has designed a wide range of television signal security systems which it is bringing to market throughout the 1990's. The Dectec corporate reputation rests on its credibility to deliver a consistently secure signal process to all levels of the international broadcast industry. For us, the stakes are high since our corporate objective includes the implementation of a series of products which provide a form of "vertical integration" for signal security. This will result in complete (vertically integrated) copyright protection, from the broadcast tower through to the home VCR.

Enclosed is some additional information about our company.

Sincerely,

A handwritten signature in black ink, appearing to be 'JG', with a long horizontal flourish extending to the right.

John Grayson  
C.E.O.  
Dectec Intl. Inc.

JG/slt  
encl.

cc: P. Resch - Disney Channel

| **Exhibit H**

# **VideoCipher Upgrade/Conversion Update**

BY DAVID HARTSHORN

Rumblings of discontent emanated last month from behind closed doors where programmers met separately with General Instrument (GI) to negotiate when the datastream will be shut off and how new decoders will be shipped and installed. Players involved in the negotiations told TVRO Dealers that programmers are "more than frustrated" with the talks' slow pace. They were expected to be completed by early July.

Still more urgency was lent to the proceeding when, in late August, another decoder manufacturer, Canada-based DECTEC, applied to become an executive member of the Satellite Broadcasting & Communications Association (SBCA). DECTEC said the move was made to promote a "cooperative approach" to changing out VideoCipher II units.

The company, led by John Grayson, formally requested to become a member of the Anti-Piracy Task Force, the SBCA Encryption Committee and the Marketing Committee. DECTEC said it looks forward to becoming "actively involved" in the SBCA's industry-wide conversion program. DECTEC has met with several programmers and rights holders to discuss a conversion scenario, which Grayson said - with more than a touch of irony -

will "help the SBCA and GI change out all field VCII's as . . . painlessly as possible."

DECTEC's exchange program is based on its Secure Universal Norm (S.U.N.) system. The company's authorization and access control system was designed to provide programmers with independent control over a national subscriber base.

S.U.N. descramblers can be addressed by programmers or third-party packagers without

units per month; initial volume production will begin in the first quarter of 1992. DECTEC "guarantees" backward compatibility with VCII and VCII Plus and offers a "full guarantee" against piracy.

DECTEC began shipping S.U.N. descramblers to Canadian distributors on August 30. The company said it has written orders for 1,000 units and has shipped several hundred decoders into the field. The units are shipped authorization-ready, DECTEC said; only non-subscription services presented in the clear can be seen without authorization and payment.

"Programmers are almost willing to take a chance [on DECTEC]," said a programming source who recently was courted by Grayson, "Especially the middle people."

Meanwhile, sources close to programmers' upgrade/conversion talks with GI told us that during what was supposed to be a final meeting with one programmer, GI presented a last-minute list of new demands. Included was a request that the programmer pick up the upgrade tab for consumers who subscribed only to its service, since such customers were "likely to be pirates."

Asked whether GI had presented a major programmer

---

**Illegal consumers  
conceivably could  
qualify for free  
upgrades by buying  
programming, then  
sending their chipped  
units in under GI's  
nose.**

---

a centralized DBS authorization facility. "Programmers can opt for independent control at any time," Grayson said. "But in the interim, dish owners subscribing through (S.U.N.) will be authorized through third-party distributors."

DECTEC plans to produce up to 90,000 S.U.N.

with such last-minute demands, a GI spokesman denied that the company was practicing brinkmanship during negotiations. Michael Meltzer, GI's vice president of marketing, said the talks are "productive. Everybody is very positive." He said drafts of agreements still are "passing between lawyers," and GI still is planning for the program to begin in 1992's first quarter. It's expected to take six to eight months to complete, Meltzer added.

Reports that GI wanted certain subscribers to pay for upgrades may stem from concerns that owners of chipped VideoCipher II boxes may take advantage of an upgrade loophole. The angle is based on programmers' offer to pay for the upgrade of legal consumers who have purchased a certain amount of programming.

Since thousands of

descramblers are likely to inundate GI when the changeover to VideoCipher II Plus RS begins in earnest, and since determining whether or not a unit has been chipped can be time-consuming, illegal consumers conceivably could qualify for free upgrades by buying programming, then sending their chipped units in under GI's nose.

But Meltzer said the key issues stalling the negotiations are that the upgrade/conversion timetable is "gated" by the introduction of VideoCipher RS (Renewable Security) and that each programmer has its own agenda: "That takes time. If you look back and try to draw a parallel from another [industry], you won't see anything like this."

Another source close to the proceeding told us key points of contention range from what a dealer should be paid for installing a new system to how equip-

ment will be distributed. New options might include distribution of new units through programmers or distributors, or direct to the consumer.

How GI will handle future breaks of its decoding technology also is a recurring question. In addition, how will a break of the technology be determined? And what triggers a new smart card being sent out to consumers who own an RS unit? Of particular concern is how the smart card will be distributed.

Participants' answers to such questions vary depending on company alliances, industry sector, strategy and other variables. But observers largely agree that the longer negotiations drag on, the weaker becomes GI's position in the industry and the stronger becomes the position of competing decoder interests.

Apr. 1/90

# WHAT'S HAPPENING



## DAMNED IF YOU DO - DAMNED IF YOU DON'T

**T**ORONTO...In many ways the Canadian satellite industry is at the crossroads. Presently there are over 250,000 homes wired to receive 100 channels by the dish. With about 2.8 persons per household, that's almost 1,000,000 people who sit down every night to enjoy the signals from the domestic satellite belt.

To a large degree the most popular channels with Canadian's are American. While there is no statistical data, I suspect that if you were to poll Canadian satellite owners you would find that the pay-per-view (PPV) channels, like Viewers Choice and Cable Video Store, followed by HBO, Showtime, The Movie Channel and Cinemax, then probably ESPN and Disney are the most popular.

However, none of these channels sell their service in Canada. Canadians have been able to enjoy them due to the ingenuity of several "rocket scientists" who cleverly tricked the VideoCipher descrambler into thinking subscription fees were paid, and it turns all the channels on. This has led many in government to quantify the Canadian satellite business as; "A bunch of cowboys stealing programming."

These tricked decoders will probably continue to work for many years, because it's difficult to envisage a recall of 2.5 million VideoCiphers in Canada and the U.S. without risking massive class action challenges against General Instrument, the manufacture of the VideoCipher. Also, the political repercussions in the form of satellite friendly legislation. Bills in the U.S. to force programmers to lower prices equivalent to cable rates have been narrowly defeated in the last two years. Disfranchising 2.5 million decoder owners would probably be enough to get these Bills passed. Consequently, this is a risk the U.S. programmers are not willing to take.

The question is; how are they going to get the 2.5 million insecure decoders in the field back and replace them with a newer more secure model? Planned obsolescence is the answer. General Instrument and the programmers are hoping that over the next several years dish owners will trade in their old VideoCipher II and replace it with the new VideoCipher II Plus.

How are they going to do this? Remember that the present VideoCipher II can descramble 56 channels and already there are 57 programmers using the VideoCipher system. The VideoCipher II Plus can handle 256 channels. While most of the present programming will continue to be available to the present VideoCipher decoders, look for a lot of new channels to appear in your programming guide this year, and you won't be able to receive them unless you have one of the new VideoCipher II Plus decoders.

This creates quite a dilemma for Canadian dish owners. If you trade in your present decoder for a new VideoCipher II Plus decoder you will have to pay for programming. Moreover, if you were to pay for all the programming you are now getting for free you would pay around \$1,000 a year. This because the new VideoCipher II Plus cannot be tricked by the "rocket scientists" like the present VideoCipher model.

The only programming presently sold in Canada for the new VideoCipher II Plus decoders is First Choice, The Family Channel, CNN, CNN Headline, Super Ecran, Canal Famille and RDS. To get HBO, and all the other popular U.S. channels, Canadians will have to use a U.S. address as the place where their decoder resides. This is commonly called the "gray market".

Unfortunately, Canadian dish owners will be forced to misrepresent their location because of the marketing practices of the U.S. program suppliers and the Canadian Radio-television and Telecommunications Commission (CRTC).

For their part the U.S. programmers won't sell to dish owners here because they resell most of the programming on the U.S. channels to distributors here. They claim they are protecting the Canadian distributors' territory by withholding programming from dish owners here. This is true to some extent, Canadians can get all the U.S. movies by subscribing to First Choice, Superchannel or Premier Choix. But none of these channels show heavyweight boxing, making Canadians favor HBO. Moreover, channels like Arts and Entertainment have, up to now, expressed little interest in servicing Canadian dish owners.

The CRTC will not allow channels to be sold in Canada which endanger the

market of Canadian equivalents. Sports channels like ESPN will be excluded because of TSN, Disney would hurt The Family Channel, MTV would hurt Much Music and all the U.S. movie channels would hurt First Choice, Super Channel and Super Ecran.

Will Canadians be content without ESPN, HBO, Viewers Choice, Disney, MTV, plus all those sports channels which show an abundance of hockey games? I think not! Therefore, look to see an underground emerge, where Canadian satellite dealers will form alliances with their U.S. compatriots, and cable companies, to supply them with U.S. addresses and get the decoders authorized.

Why should these U.S. satellite dealers be so helpful? It's simple. Money! Consider that 40,000 satellite systems are sold each year in Canada and the U.S. satellite dealers can earn \$50 for each subscription package they sell, that's \$2-million a year in kickbacks. Who wouldn't be helpful.

The only alternative to the gray market is attempts by First Choice and ValueVision to put together U.S. programming packages for sale here. But they are moving too slow, and fighting amongst themselves for dominance.

I have been called a traitor, anti Canadian and a red-neck many times for my stance against the present electronic border we now have, preventing U.S. programming coming here, and Canadian programming going south. But, I just can't envisage Canada being able to enforce the present closet mentality when we see the U.S. exploding with applications for satellite technology. Ironically, a technology that Canada pioneered, then regulated to death.

Typically, the Canadian way will be to keep a finger in the programming dike with CRTC rules and restrictive distribution practices by U.S. programmers, but eventually, when there are about a million dish owners here tuning to the U.S. programming of their choice, the finger will come out and we'll be swamped.

Simply put. Now that borders are crumbling all around the world, the electronic border between the U.S. and Canada makes no sense in today's Global Village.

Come on guys, face reality, get the finger out, NOW!



# "The \$64,000 Question"

by Robin Adair and printed in "The Transponder", the nation's leading satellite industry publication.

October 1991.

Remember the TV game show "The 64,000 QUESTION" and another called "20 Questions?" The Satellite Broadcasting and Communications Association (SBCA) Satellite Show July 11 - 13, reminded me of both games. Everyone there sought clues in hopes we could be winners or at least survive over the next 18 months.

The Big Question was and is: What will happen to owners of untampered VCII's who are or are not subscribing to programming?

Concerns included: What will happen to subscribers who bought VCII Plus modules prior to the 4/1/91 three year upgrade protection plan?

- Will those with untampered VCII's who are not current subscribers be upgrades?
- Who will provide upgrades?
- Will upgrades be VCII Plus with Consumer Security Protection Program (CSPP) or VCII Plus RS (renewable security)?
- Should the purchase of modules/IRDs be postponed until VCII Plus RS is available?
- Who pays for upgrade service calls?
- Upgrade/Conversion - What is the difference between upgrade and conversion?

Participants in this version of "Twenty Questions" answered questions with as little useful information as possible; i.e. yes/no. I left Nashville with more questions than answers. Here is an example of a question asked of GI and their answer: What happens to subscribers with VCII Plus modules purchased prior to 4/1/91? GI's answer- No subscriber with a VCII Plus will be disenfranchised.

GI handed all who attended their presentation a pseudo RS ClipCard that was to be inserted in a mockup VCII Plus RS at the GI booth to see if they won a prize. GI pointed out the planned RS

card would be thicker (2-3mm) and shorter so modules not accessible from the back of an IRD (STS and some Chaparral IRDs) can use RS technology. The pseudo card had a barcode label on the back. It did not contain circuitry or data.

GI did not hold a single press conference. A select group of press attended a private GI presentation. This reporter was not invited nor aware of it ('til the next day). Even Linda Brill, SBCA Public Relations Manager, did not know about the private press briefing. A dealer ended up in the room without realizing it was for press only. When the dealer started asking questions, everything was abruptly stopped. I asked Linda Brill, Mike Walker, and Mike Meltzer to help arrange an interview, yet by 2:00 p.m. Saturday (two days later), no GI representative could find time to answer my questions!

Based on having attended all scheduled press conferences and as many seminars as possible, including all general presentations, less has been decided than remains to be finalized.

Here is a summary:

1. The term "Upgrade" means exchanging subscribers' untampered modules for VCII Plus and/or VCII Plus RS modules. (Will it be free?)

2. "Conversion" means replacing tampered modules with either a VCII Plus or a VCII Plus RS. (For how much?)

3. First premium services, and then other programmers will offer VCII Plus "upgrades" for subscribers. Cost, if any, method of distribution, dealer reimbursement, manner of return, final destination of untampered VCII's, an accurate time table, subscription/renewal requirements, if any, are uncertain.

4. Program Packages are offering conver-

sion options that require purchase of programming and a Plus module. Prices depend on competition and will likely go up as data stream shut down approaches in late 1992.

5.The SBCA plans a public relations and media campaign as well as distributor and dealer seminars during the 12-18 month transition period.

6.The VCII Plus Consumer Security Protection Program (CSPP) is conditioned as follows:

a.Owners must subscribe to VCII Plus encrypted programming.

b.70% of programmers (excluding pay-per-view) must upgrade their scrambling system by migrating to the new version of the VCII Plus.

c.70% of the same programmers must discontinue transmission of their prior signal.

d.(CSPP) protected modules are not transferable.

e."VideoCipher makes no assurances that any upgrade under this program will take place." (From GI literature)

f."The terms and conditions of the Program are subject to change without notice." (From GI Literature).

7.Variables such as the success of "upgrade" and "conversion" programs, the Plus' security development and testing of VCII Plus RS and DigiCipher, current/future alternative encryption-de-cryption systems such as John Grayson's SUN system, provision for inactive prior subscribers with un-

tampered VCII's and VCII Plus modules land enough unknowns to fill several pages all make the future highly unpredictable.

Assuming programmers provide subscribers with VCII Plus or Plus RS modules at no cost, not counting subscription renewal, it seems prudent to forego upgrading at this time unless a customer must have pay-per-view, or their untampered VCII has died.

The VideoPal \$100 + coupons and the announced free Olympic TripleCast Silver Pack (\$125 value) special with Channel Master, GI, and Panasonic IRDs sold after 10/1/91 - 8/10/92, helps offset higher module and MOM prices. GI claims other manufacturers are welcome to participate. The proposed "free" "upgrade" for subscribers with untampered modules, "conversion" for those with altered VCII's, (GI, distributors, and even those who helped consumers steal programming, can profit again), and a myriad of program packagers and inducements/enhancements for marketing programming, etc., makes things easier if no more profitable.

If you think you have answers, good! Share them with the rest of us. It is hard to win when the rules keep changing and we can not write the big question(s) nor the answer(s)!

# VideoCipher Upgrade / Conversion Update

BY DAVID HARTSHORN

**N**ever have so many had to entrust so much to so few: If Winston Churchill had been fated to lead the TVRO industry's fight against piracy instead of fending off attacking Germans, that's probably how he would sum up the VideoCipher upgrade/conversion program.

More than a month has elapsed since the SBCA show in Nashville, where those making the decisions — General Instrument and the programmers — had hoped to make announcements about the upgrade/conversion. But, at our mid-August deadline, the drums still were rolling as GI continued marathon negotiations with HBO, Netlink and Showtime over how the program will be executed.

As it stands now, VC II Plus CSPP modules (maroon cages) come with a three-year warranty to upgrade to the next level, which will be VC II Plus RS (Renewable Security), GI's next-generation system that relies on interchangeable smart cards for upgrades (for more RS coverage, see *TVRO Dealer*, August).

VC II Plus RS will be manufactured beginning in early 1992 and will be the new standard when the VC II datastream is shut off, and when programmers start using the smart cards. The CSPP module will be exchanged for an RS and plans are afoot to upgrade the original blue-cage modules for free. HBO, Netlink and Showtime, meanwhile, reportedly are close to signing an agreement with GI that would usher in RS as the industry's next de facto scrambling system.

On other fronts, in an effort to expedite the upgrade/conversion process, the SBCA recently formed a Satellite Marketing Council (SMC), which in turn formed a subcommittee for transition marketing. The SMC is chaired by Ann Kirschner, executive vice president of PrimeTime 24.

The subcommittee met August 8 to begin fine-tuning the association's Communications Plan, which is designed to guide the industry through the shift to

VC II RS. Based on a report given to the subcommittee by GI, the upgrade/conversion process is to begin in January 1992. According to GI, the alpha and beta field testing of the VideoCipher II RS will be completed by the end of 1991.

In related business, the subcommittee implemented the first phase of the Communications Plan, which includes:

1) A toll-free consumer hotline to answer questions.

2) Upgrade/conversion "Dealer Education Kits" to be distributed at the 1992 SBCA trade shows in Reno and Baltimore.

3) Continuous consumer and trade advertising to update the satellite industry and potential dish owners.

Meanwhile, budget discussions for the first phase have begun, and the group will meet again on September 19 to adopt the Communications Plan. The group was formed in July during the SMC's first meeting at the Nashville show, where the council also formed two other subcommittees: one for marketing research projects and an awards group to recognize outstanding marketing efforts by industry professionals.

Kirschner told *TVRO Dealer* that there still is confusion about "some details" relating to the upgrade. Kirschner said she wished the program was "tied together with a neat bow, but it isn't. We need flexibility and creativity."

One issue sure to require creative problem solving is how to deal with consumers who thought they were legal programming customers but aren't: "Because they weren't buying legally, many won't qualify for a free upgrade, and they will feel sorely abused." Kirschner said resolving that question may come down to a review of each consumer on a case-by-case basis. But she cautioned that the upgrade program still is in a "broad-strokes phase," meaning that its primary thrust will be to deal first with the largest consumer category — legal customers.

There are at least three sticking points in datastream negotiations between GI and programmers, said Rich Fickle, Netlink executive vice president. Fickle, who was involved in negotiations held during the SBCA's Nashville show, said certain "consumer issues" rank high on the list of problems. Comparing the datastream shutoff to the savings and loan bailout, he said it's "almost" necessary for the government to step in and "clean house."

Other points of contention among negotiators are the module's cost, as well as how much, if any, free programming should be offered to illegal customers converting to legitimate systems. Fickle also said another point has been raised: What about consumers who bought VC II Pluses before April 1? Those customers currently aren't covered by a GI warranty that guarantees free upgrades should the technology be cracked.

Showtime CEO Tony Cox, who delivered the keynote address at the SBCA's summer show, said Showtime is committed to the VC II Plus upgrade. He said they are "too far down the road" to turn back. Exhibiting apparent frustration with the meetings' slow pace, Cox said Showtime is "working with — I guess that is a euphemism for negotiating — with GI."

Showtime hoped a decision would be made on the shutoff before the SBCA show, said Cox, who predicted that an upgrade plan will be announced "in a matter of weeks" after the convention. Cox said the upgrade will allow programmers to terminate the VC II datastream beginning in the first quarter of 1992 and, "if I can influence my colleagues, a lot sooner than that."

Not everyone will get what they want from the upgrade program, Cox warned, including Showtime and GI: "But I guess in life, sometimes a bad compromise is better than a good battle and we've got to stop the battle and take advantage of our second chance."

**TVRO**



## JONES EMERY

BARRISTERS. SOLICITORS. NOTARIES PUBLIC

GEORGE F. JONES, O.C.  
MICHAEL D. DONISON  
MICHAEL J. HARGREAVES  
DAVID S. MULRONEY  
MICHAEL P. HOLMES

E.H. ALAN EMERY, O.C.  
TERRANCE D. SWAN  
F.J. SCOTT HALL  
PHILIP J. PENNER  
KELLY R. DOERKSEN

VICTORIA (804) 382-7222  
FROM VANCOUVER 681-0713  
FAX (804) 382-5438

SUITE 1212, 1175 DOUGLAS STREET  
VICTORIA, BRITISH COLUMBIA  
CANADA  
P. O. BOX 880 V8W 2R9

OUR FILE 90-1728 AE

January 17, 1991

VIA FAX: (212) 207-6377

General Instrument Inc.  
767, 5th Avenue  
New York, NY  
USA 10153

Attention: Legal Department

Dear Sirs:

We are writing to you on behalf of our client, Dectec International Inc., with respect to difficulties which appear to have arisen as follows:

Industry publications have in recent months contained numerous statements attributed to spokesmen of General Instrument, particularly one Michael Meltzer, Vice-President of Sales and Marketing.

These statements include clear insinuations that our client has been or will be acting illegally in the development and marketing of its SUN interface. It is clear that the motivation behind this scurrilous attack upon the business reputation of our client and its principal, Mr. Grayson, is a desperate attempt on General Instrument's part to preserve its economic dominance of the television encode/decoder market in North America at the expense of our client.

The mounting of this campaign is clearly actionable. Our client is currently considering legal proceedings both within Canada and the United States against General Instrument and those individuals responsible for the defamatory statements.

On behalf of our client, we demand that General Instrument:

- (a) instruct all appropriate employers and agents to cease making defamatory statements concerning our client, its principal or its product;

General Instrument Inc.  
Page 2  
January 17, 1991

- (b) publish in all appropriate industry journals a retraction and apology, the wording of which should be submitted to us for approval prior to publication.

Compliance with this demand will not relieve General Instrument or any of its employees or agents from a claim for damages but of course an appropriate apology and retraction would serve to mitigate what could undoubtedly be a very substantial claim.

We look forward to hearing from you.

Yours truly,

JONES EMERY

Per:

  
E. H. Alan Emery

AE/ws

→ bc: Mr. John Grayson



DECTEC INTERNATIONAL INC.

P.O. BOX 2275, 1962 MILLS ROAD, SIDNEY, BRITISH COLUMBIA, CANADA V8L 3S8  
PHONE: (604) 655-4463 FAX: (604) 655-3906

August 28, 1991

Honourable P Beatty  
Minister of Communication  
Department of Communications  
300 Slater Street  
Ottawa, K1A 0C8

Dear Hon. Beatty,

Further to my letter of August 16 regarding DOC's booklet on Satellite TV Reception in Canada, I would like to offer our assistance in order to change certain parts of the text which if printed and distributed in its current form will likely cause our company to suffer severe and long lasting damages.

As a company, we take exception to the following text contained in the booklet and respectfully offer for your unprejudiced consideration alternative material:

At page 2, paragraph 4, entitled "Black Box",

"black boxes or black ciphers . . . are capable of decoding several different encryption formats" is misleading as the definition cited is a clear reference to DECTEC's Secure Universal Norm scrambling system which is the only decoder available to date with the sophisticated componentry required of a reprogrammable multi-format technology. (Exhibit A).

It would be more appropriate to state, "as black boxes or black ciphers provide open access to scrambled television without authorization enabling consumers to view without charge for-pay subscription services. The intention of a black box or black cipher is to provide free access to subscription television programming thereby circumventing a programmer's lawful right to collect payment for services provided."

For your own background, several filings before U.S. Government agencies, including the FCC, the U.S. Justice Department, State Attorney Generals, and the Federal Trade Commission, as well as several articles printed in trade publications, and reports submitted to members of



Recycled Paper

our own Canadian Government find that the Videocipher II technology distributed by the General Instrument Division of Forstmann Little enables and encourages piracy and the fruition of a black box industry. (Exhibit B).

There is no connection whatsoever between signal theft associated with GI's VCII and the S.U.N. technology developed by DECTEC International Inc.

The S.U.N. system is functionally unbreakable and while we expect that it will not be possible to produce a black box to receive services authorized through our Secure Universal Norm system, we are deeply concerned over the proliferation of VCII piracy which dominates the Canadian marketplace and creates unfair competition for the sellers of secure subscription television services. (Exhibit C).

At page 6 and 7,

In consideration of the highly competitive nature of the subscription television distribution market, it appears somewhat unethical for the DOC to advertise some and not all sources for subscription television programming. Specialty Programming Source is GI's largest equipment distributor in Canada. Should the DOC desire to publish the services offered through our competitor, we believe the document should also include other sources including but not limited to distributors providing subscription television services for the S.U.N. system.

Our S.U.N. descrambling system competes with GI's VCII descrambler and is in no way connected to the black box or black cipher industry. (Exhibit D). All programming channels available through S.U.N. are secured and cannot be accessed without proper authorization and payment to the copyright holder.

At page 3, entitled "What is Illegal?"

Where the document states "The new law also makes it illegal to manufacture, modify, or otherwise deal in equipment that could be used to decode scrambled signals without authorization," it appears to follow that it would be illegal to intentionally manufacture and distribute decoders which could be easily chipped and made capable of decoding signals without authorization.

In this light, perhaps the DOC ought refrain from recommending at all the purchase and use of the VCII descrambler.



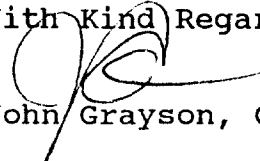
Therefore, regarding text at page 8 entitled "What can I do if my decoder is illegal?"

We recommend changes as follows: " if you have a Videocipher II (VII) decoder, it is probably illegal and you should purchase a new decoder. (Even though the basic VCII is still being distributed in Canada, it is a pirate device and may be replaced by the General Instrument VCII Plus or the DECTEC S.U.N. unit). If your dealer is uncertain of what to do, information is available directly from the manufacturers of these decoders, and you should call General Instrument at 1-704-327-4700 or DECTEC at 1-604-655-4463."

Please note that as a company we are interested in implementing a conversion plan within Canada to enable Canadian dish owners and cable systems to upgrade pirate VCIIIs to S.U.N. decoders for free if an annual subscription to a package of CRTC-approved programming channels is purchased.

I appreciate your time in considering these comments, and we look forward to working with you in any way possible to encourage a healthy and prosperous subscription television market in Canada.

With Kind Regards,

  
John Grayson, CEO

cc: Mr Ted Ledingham, Acting Director of Broadcasting Policy  
Mr Ken Hepburn, Sr Asst Deputy Minister for Corporate Policy  
Mr Ian Angus, Angus and Associates  
Mr Mark Lewis, C.V.R.O.  
Mr Howard McCurdy, M.P.  
Mr Cheesman, Sr Policy Analyst  
Ms Elizabeth Gilhooly, Legal